

A disinfection and purification composition for producing potable fluids, comprising consisting essentially of:

- (a) at least one metal selected from the group consisting of the metals in the Periodic Table of the Elements, groups 1b,2b,3b,4b,5b,6b,7b,8,3a,4a, and 5a;
  - (b) at least one plant extract<u>or chemical equivalent thereof</u>; and
  - (c) at least one alcohol.

## **CLAIM 2.** (Currently amended)

A disinfection and purification composition for producing potable fluids, comprising consisting essentially of:

- (a) at least one metal selected from the group consisting of the metals in the Periodic Table of the Elements, groups 1b,2b,3b,4b,5b,6b,7b,8,3a,4a, and 5a; and
  - (b) at least one plant extract<u>or chemical equivalent thereof</u>.

## **CLAIM 3.** (Currently amended)

A disinfection and purification composition <u>for producing potable fluids</u>, <del>comprising</del> consisting essentially of:

- (a) at least one metal selected from the group consisting of the metals in the Periodic Table of the Elements, groups 1b,2b,3b,4b,5b,6b,7b,8,3a,4a, and 5a; and
  - (b) at least one alcohol.
- CLAIM 4. (Currently amended) The disinfection and purification composition <u>for</u> <u>producing potable fluids</u> of CLAIM 1 wherein at least one of the metals selected is copper.
- CLAIM 5. (Currently amended) The disinfection and purification composition <u>for</u> <u>producing potable fluids</u> of CLAIM 1 wherein at least one of the metals selected is silver.
- CLAIM 6. (Currently amended) The disinfection and purification composition <u>for</u> <u>producing potable fluids</u> of CLAIM 2 wherein at least one of the metals selected is copper.
- CLAIM 7. (Currently amended) The disinfection and purification composition <u>for</u> <u>producing potable fluids</u> of CLAIM 2 wherein at least one of the metals selected is silver.
- CLAIM 8. (Currently amended) The disinfection and purification composition <u>for</u> <u>producing potable fluids</u> of CLAIM 3 wherein at least one of the metals selected is copper.
- CLAIM 9. (Currently amended) The disinfection and purification composition <u>for</u> <u>producing potable fluids</u> of CLAIM 3 wherein at least one of the metals selected is silver.

CLAIM 10. (Currently amended) The disinfection and purification composition <u>for</u> <u>producing potable fluids</u> of CLAIM 1 wherein the metals selected are copper and silver.

CLAIM 11. (Currently amended) The disinfection and purification composition <u>for</u> <u>producing potable fluids</u> of CLAIM 2 wherein the metals selected are copper and silver.

CLAIM 12. (Currently amended) The disinfection and purification composition <u>for producing</u> <u>potable fluids</u> of CLAIM 3 wherein the metals selected are copper and silver.

CLAIM 13. (Currently amended) The disinfection and purification composition <u>for producing</u> <u>potable fluids</u> of CLAIM 1 wherein the plant extracts <u>or chemical equivalents thereof</u> are selected from the group consisting of angiosperms <u>or chemical equivalents thereof</u>.

CLAIM 14. (Currently amended) The disinfection and purification composition <u>for producing</u> <u>potable fluids</u> of CLAIM 1 wherein the alcohol is glycerol.

CLAIM 15. (Currently amended) The disinfection and purification composition <u>for producing</u> <u>potable fluids</u> of CLAIM 2 wherein the plant extracts<u>or chemical equivalents thereof</u> are selected from the group consisting of angiosperms<u>or chemical equivalents thereof</u>.

CLAIM 16. (Currently amended) The disinfection and purification composition <u>for producing</u> <u>potable fluids</u> of CLAIM 3 wherein the alcohol is glycerol.

CLAIM 17. (Currently amended) The disinfection and purification composition <u>for producing</u> <u>potable fluids</u> of CLAIM 1 wherein the plant extract is extracted from grapefruit<u>or chemical</u> <u>equivalent thereof</u>.

CLAIM 18. (Currently amended) The disinfection and purification composition <u>for producing</u> <u>potable fluids</u> of CLAIM 2 wherein the plant extract is extracted from grapefruit <u>or chemical</u> <u>equivalent thereof</u>.

**CLAIM 19.** (Currently amended) A method of manufacturing the disinfection and purification composition for producing potable fluids of **CLAIM 1** comprising consisting essentially of the steps of:

selecting at least one of the metals from the group consisting of the metals in the Periodic Table of the Elements, groups 1b,2b,3b,4b,5b,6b,7b,8,3a,4a, and 5a;

selecting the plant extract<u>or chemical equivalent thereof;</u>

selecting the alcohol; and

mixing the selected metals together with the selected plant extract<u>or chemical</u> equivalent thereof and the selected alcohol.

CLAIM 20. (Currently amended) A method of manufacturing the disinfection and purification composition for producing potable fluids of CLAIM 2 comprising consisting essentially of the steps of:

selecting at least one of the metals from the group consisting of the metals in the Periodic Table of the Elements, groups 1b,2b,3b,4b,5b,6b,7b,8,3a,4a, and 5a;

selecting the plant extractor chemical equivalent thereof; and

mixing the selected metals together with the selected plant extract or chemical equivalent thereof.

CLAIM 21. (Currently amended) A method of manufacturing the disinfection and purification composition <u>for producing potable fluids</u> of CLAIM 3 <u>comprising consisting essentially of the steps of:</u>

selecting at least one of the metals from the group consisting of the metals in the Periodic Table of the Elements, groups 1b,2b,3b,4b,5b,6b,7b,8,3a,4a, and 5a;

selecting the alcohol; and

mixing the selected metals together with the selected alcohol.

CLAIM 22. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 19 comprising consisting essentially of the steps of:

infusing the mixture into a user selected item.

CLAIM 23. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 19 comprising consisting essentially of the steps of:

applying the mixture onto the surface of a user selected item.

CLAIM 24. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 19 comprising consisting essentially of the steps of:

dissolving the mixture into a user selected liquid.

CLAIM 25. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 20 comprising consisting essentially of the steps of:

infusing the mixture into a user selected item.

CLAIM 26. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 20 comprising consisting essentially of the steps of:

applying the mixture onto the surface of a user selected item.

CLAIM 27. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 20 comprising consisting essentially of the steps of:

dissolving the mixture into a user selected liquid.

CLAIM 28. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 21 comprising consisting essentially of the steps of:

infusing the mixture into a user selected item.

CLAIM 29. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 21 comprising consisting essentially of the steps of:

applying the mixture onto the surface of a user selected item.

CLAIM 30. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 21 comprising consisting essentially of the steps of:

dissolving the mixture into a user selected liquid.

**CLAIM 31.** (Currently amended) A method of manufacturing the disinfection and purification composition for producing potable fluids of **CLAIM 1** comprising consisting essentially of the steps of:

selecting at least one of the metals from the group consisting of the metals in the Periodic Table of the Elements, groups 1b,2b,3b,4b,5b,6b,7b,8,3a,4a, and 5a;

selecting the plant extract<u>or chemical equivalent thereof;</u>

selecting the alcohol;

selecting at least one disinfectant compound from the group consisting of ozone, peroxides, halogens from the Periodic Table of the Elements, group 7a, halogenated hydrocarbons, amides, amines, and halogenated dioxides; and

mixing the selected metals together with the selected plant extract<u>or chemical</u> equivalent thereof, the selected alcohol and the selected disinfectant compounds.

CLAIM 32. (Currently amended) A method of manufacturing the disinfection and purification composition <u>for producing potable fluids</u> of CLAIM 2 <u>comprising consisting essentially</u> of the steps of:

selecting at least one of the metals from the group consisting of the metals in the Periodic Table of the Elements, groups 1b,2b,3b,4b,5b,6b,7b,8,3a,4a, and 5a;

selecting the plant extract or chemical equivalent thereof;

selecting at least one disinfectant compound from the group consisting of ozone, peroxides, halogens from the Periodic Table of the Elements, group 7a, halogenated hydrocarbons, amides, amines, and halogenated dioxides; and

mixing the selected metals together with the selected plant extract—or chemical equivalent thereof and the selected disinfectant compounds.

**CLAIM 33.** (Currently amended) A method of manufacturing the disinfection and purification composition for producing potable fluids of **CLAIM 3** comprising consisting essentially of the steps of:

selecting at least one of the metals from the group consisting of the metals in the Periodic Table of the Elements, groups 1b,2b,3b,4b,5b,6b,7b,8,3a,4a, and 5a;

selecting the alcohol;

selecting at least one disinfectant compound from the group consisting of ozone, peroxides, halogens from the Periodic Table of the Elements, group 7a, halogenated hydrocarbons, amides, amines, and halogenated dioxides; and

mixing the selected metals together with the selected alcohol and the selected disinfectant compounds.

CLAIM 34. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 31 comprising consisting essentially of the steps of:

infusing the mixture into a user selected item.

CLAIM 35. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 31 comprising consisting essentially of the steps of:

applying the mixture onto the surface of a user selected item.

**CLAIM 36.** (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of **CLAIM** 31 comprising consisting essentially of the steps of:

dissolving the mixture into a user selected liquid.

CLAIM 37. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 32 comprising consisting essentially of the steps of:

infusing the mixture into a user selected item.

CLAIM 38. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 32 comprising consisting essentially of the steps of:

applying the mixture onto the surface of a user selected item.

CLAIM 39. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 32 comprising consisting essentially of the steps of:

dissolving the mixture into a user selected liquid.

CLAIM 40. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 33 comprising consisting essentially of the steps of:

infusing the mixture into a user selected item.

CLAIM 41. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 33 comprising consisting essentially of the steps of:

applying the mixture onto the surface of a user selected item.

CLAIM 42. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 33 comprising consisting essentially of the steps of:

dissolving the mixture into a user selected liquid.

CLAIM 43. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 19 comprising consisting essentially of the steps of:

infusing the mixture into a user selected item; and

exposing the mixture infused item to at least one treatment selected from the group consisting of radiation, light, sonic blasts and extremes of temperature.

CLAIM 44. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 19 comprising consisting essentially of the steps of:

applying the mixture onto the surface of a user selected item; and

exposing the mixture applied surface to at least one treatment selected from the group consisting of radiation, light, sonic blasts and extremes of temperature.

CLAIM 45. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 19 comprising consisting essentially of the steps of:

dissolving the mixture into a user selected liquid; and

exposing the liquid dissolved mixture to at least one treatment selected from the group consisting of radiation, light, sonic blasts and extremes of temperature.

CLAIM 46. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 20 comprising consisting essentially of the steps of:

infusing the mixture into a user selected item; and

exposing the mixture infused item to at least one treatment selected from the group consisting of radiation, light, sonic blasts and extremes of temperature.

CLAIM 47. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 20 comprising consisting essentially of the steps of:

applying the mixture onto the surface of a user selected item; and

exposing the mixture applied surface to at least one treatment selected from the group consisting of radiation, light, sonic blasts and extremes of temperature.

CLAIM 48. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 20 comprising consisting essentially of the steps of:

dissolving the mixture into a user selected liquid; and

exposing the liquid dissolved mixture to at least one treatment selected from the group consisting of radiation, light, sonic blasts and extremes of temperature.

CLAIM 49. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 21 comprising consisting essentially of the steps of:

infusing the mixture into a user selected item; and

exposing the mixture infused item to at least one treatment selected from the group consisting of radiation, light, sonic blasts and extremes of temperature.

CLAIM 50. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 21 comprising consisting essentially of the steps of:

applying the mixture onto the surface of a user selected item; and

exposing the mixture applied surface to at least one treatment selected from the group consisting of radiation, light, sonic blasts and extremes of temperature.

CLAIM 51. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 21 comprising consisting essentially of the steps of:

dissolving the mixture into a user selected liquid; and

exposing the liquid dissolved mixture to at least one treatment selected from the group consisting of radiation, light, sonic blasts and extremes of temperature.

CLAIM 52. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 31 comprising consisting essentially of the steps of:

infusing the mixture into a user selected item; and

exposing the mixture infused item to at least one treatment selected from the group consisting of radiation, light, sonic blasts and extremes of temperature.

CLAIM 53. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 31 comprising consisting essentially of the steps of:

applying the mixture onto the surface of a user selected item; and

exposing the mixture applied surface to at least one treatment selected from the group consisting of radiation, light, sonic blasts and extremes of temperature.

CLAIM 54. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 31 comprising consisting essentially of the steps of:

dissolving the mixture into a user selected liquid; and

exposing the liquid dissolved mixture to at least one treatment selected from the group consisting of radiation, light, sonic blasts and extremes of temperature.

CLAIM 55. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 32 comprising consisting essentially of the steps of:

infusing the mixture into a user selected item; and

exposing the mixture infused item to at least one treatment selected from the group consisting of radiation, light, sonic blasts and extremes of temperature.

CLAIM 56. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 32 comprising consisting essentially of the steps of:

applying the mixture onto the surface of a user selected item; and

exposing the mixture applied surface to at least one treatment selected from the group consisting of radiation, light, sonic blasts and extremes of temperature.

CLAIM 57. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 32 comprising consisting essentially of the steps of:

dissolving the mixture into a user selected liquid; and

exposing the liquid dissolved mixture to at least one treatment selected from the group consisting of radiation, light, sonic blasts and extremes of temperature.

CLAIM 58. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 33 comprising consisting essentially of the steps of:

infusing the mixture into a user selected item; and

exposing the mixture infused item to at least one treatment selected from the group consisting of radiation, light, sonic blasts and extremes of temperature.

CLAIM 59. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 33 comprising consisting essentially of the steps of:

applying the mixture onto the surface of a user selected item; and

exposing the mixture applied surface to at least one treatment selected from the group consisting of radiation, light, sonic blasts and extremes of temperature.

CLAIM 60. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 33 comprising consisting essentially of the steps of:

dissolving the mixture into a user selected liquid; and

exposing the liquid dissolved mixture to at least one treatment selected from the group consisting of radiation, light, sonic blasts and extremes of temperature.

CLAIM 61. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 19 comprising consisting essentially of the steps of:

placing the mixture in a filtration device such that a user selected fluid must pass through the filtration device and dissolve the mixture in the user selected fluid.

CLAIM 62. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 20 comprising consisting essentially of the steps of:

placing the mixture in a filtration device such that a user selected fluid must pass through the filtration device and dissolve the mixture in the user selected fluid.

CLAIM 63. (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of CLAIM 21 comprising consisting essentially of the steps of:

placing the mixture in a filtration device such that a user selected fluid must pass through the filtration device and dissolve the mixture in the user selected fluid.

**CLAIM 64.** (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of **CLAIM** 31 comprising consisting essentially of the steps of:

placing the mixture in a filtration device such that a user selected fluid must pass through the filtration device and dissolve the mixture in the user selected fluid.

**CLAIM 65.** (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of **CLAIM** 32 comprising consisting essentially of the steps of:

placing the mixture in a filtration device such that a user selected fluid must pass through the filtration device and dissolve the mixture in the user selected fluid.

**CLAIM 66.** (Currently amended) A method of using the disinfection and purification composition for producing potable fluids manufactured by the method of manufacture of **CLAIM** 33 comprising consisting essentially of the steps of:

placing the mixture in a filtration device such that a user selected fluid must pass through the filtration device and dissolve the mixture in the user selected fluid.

CLAIM 67. (New) A disinfection and purification composition consisting essentially of:

- (a) a user selected fluid;
- (b) at least one metal selected from the group consisting of the metals in the Periodic Table of the Elements, groups 1b,2b,3b,4b,5b,6b,7b,8,3a,4a, and 5a, dissolved in the user selected fluid such that if the metal selected is a United States Environmental Protection Agency regulated Priority Toxic Pollutant the concentration of the metal selected once dissolved shall be no more than the United States Environmental Protection Agency's maximum freshwater concentration Priority Toxic Pollutant criteria for the metal selected;
- (c) at least one plant extract dissolved in the user selected fluid such that if the plant extract is a United States Environmental Protection Agency regulated Priority Toxic Pollutant the concentration of the plant extract once dissolved shall be no more than the United States Environmental Protection Agency's maximum freshwater concentration Priority Toxic Pollutant criteria for the plant extract; and
- (d) at least one alcohol dissolved in the user selected fluid such that if the alcohol is a United States Environmental Protection Agency regulated Priority Toxic Pollutant the concentration of the alcohol once dissolved shall be no more than the United States Environmental Protection Agency's maximum freshwater concentration Priority Toxic Pollutant criteria for the alcohol.

**CLAIM 68.** (New) A disinfection and purification composition consisting essentially of:

- (a) a user selected fluid;
- (b) at least one metal selected from the group consisting of the metals in the Periodic Table of the Elements, groups 1b,2b,3b,4b,5b,6b,7b,8,3a,4a, and 5a, dissolved in the user selected fluid such that if the metal selected is a United States Environmental Protection Agency regulated Priority Toxic Pollutant the concentration of the metal selected once dissolved shall be no more than the United States Environmental Protection Agency's maximum freshwater concentration Priority Toxic Pollutant criteria for the metal selected; and
- (c) at least one plant extract dissolved in the user selected fluid such that if the plant extract is a United States Environmental Protection Agency regulated Priority Toxic Pollutant the concentration of the plant extract once dissolved shall be no more than the United States Environmental Protection Agency's maximum freshwater concentration Priority Toxic Pollutant criteria for the plant extract.

**CLAIM 69.** (New) A disinfection and purification composition consisting essentially of:

(a) a user selected fluid:

- (b) at least one metal selected from the group consisting of the metals in the Periodic Table of the Elements, groups 1b,2b,3b,4b,5b,6b,7b,8,3a,4a, and 5a, dissolved in the user selected fluid such that if the metal selected is a United States Environmental Protection Agency regulated Priority Toxic Pollutant the concentration of the metal selected once dissolved shall be no more than the United States Environmental Protection Agency's maximum freshwater concentration Priority Toxic Pollutant criteria for the metal selected; and
- (c) at least one alcohol dissolved in the user selected fluid such that if the alcohol is a United States Environmental Protection Agency regulated Priority Toxic Pollutant the concentration of the alcohol once dissolved shall be no more than the United States Environmental Protection Agency's maximum freshwater concentration Priority Toxic Pollutant criteria for the alcohol.